

ABSTRACT OF THE DISCLOSURE

A flip chip ball grid array package includes a thin die having a die thickness reduced from a wafer
5 thickness to reduce mismatch of a coefficient of thermal expansion between the thin die and a substrate; a plurality of thin film layers formed on the thin die wherein each of the plurality of thin film layers has a coefficient of thermal expansion that is greater than that
10 of the thin die and is less than that of the substrate; and a plurality of wafer bumps formed on the thin die for making electrical contact between the thin die and the substrate.